

Strategy of Performance Development of Indonesia Aerodrome Inspector in 2020

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Abstract

The Aerodrome Inspector at the Airport Authority Office, he carries out control activities in the form of: providing directions, guidance, technical assistance and recommendations for licensing extensions. The objective of the research is to evaluate and analyze the performance and excellence of the Aerodrome Inspector in 2019 and to analyze what are the alternative strategies for developing the Aerodrome Inspector's performance, using the Internal Factor Analysis Strategy (IFAS) and External Factor Analysis Strategy (EFAS) methods, then determining strategic priorities from the results of the IFAS and EFAS analysis with the QSPM matrix (Quantitative Strategic Planning Matrix). The competitive advantages of Aerodrome Inspector in Region III Airport Authority offices in 2019 can be formulated as follows: 1. Competent Aerodrome Inspector; 2. Officials who support the performance of the Aerodrome Inspector; 3. An appropriate Aerodrome Inspector educational background; 4. Aerodrome Inspector's knowledge of data base processing software; 5. Aerodrome Inspector's knowledge of the data processing software; 6. Aerodrome Inspector's knowledge of license renewal data processing software. The results of the study show that the right strategy for developing the performance of the Aerodrome Inspector in 2020 is a product development strategy through developing the productivity skills and knowledge of the Aerodrome Inspector himself.

Keywords

Strategy, product development, performance, competitive advantages, Aerodrome Inspector

1. Introduction

The air transportation is one of the lifeblood of a nation's economy. The development of sustainable air transportation is the task of the government in improving the people's economy. The development of air transportation is not only in the form of developing transportation facilities and supporting equipment but also in the form of guaranteeing flight safety and improving services to passengers. Airport Authority Office Region III - Surabaya was formed based on the Regulation of the Minister of Transportation Number PM 41 of 2011 concerning the Organization and Work Procedure of the Airport Authority Office. The Airport Authority Office oversees airports in four provinces in Indonesia, namely: East Java, Central Java, Yogyakarta Special Region and South Kalimantan which are the Technical Implementing Units within the

Ministry of Transportation which are under and responsible to the Minister Transportation through the Director General of Civil Aviation. The authority related to provisions regarding the position and accountability relationship of the Regional Airport III - Surabaya Authority Office in its implementation is delegated to the Director General of Civil Aviation.

For the implementation of the duties and functions of the Regional III - Surabaya Airport Authority Office, Human Resources are strengthened including Echelon II Officials (Head of Office); Echelon III Officials (Head of Division and Head of Section); Echelon IV Officials (Head of Section and Head of Subdivision); Aviation Inspector (Air Transport Inspector, Airport Inspector, Aviation Security Inspector, Aviation Navigation Inspector, Airworthiness and Aircraft Operations Inspector); and General Functional Positions. The Airport Inspector (Flight Inspector in general) at the Regional Airport III - Surabaya Authority Office is obliged to carry out control, supervision and investigation of safety, security and flight services in accordance with the fulfillment of the criteria as well as the assigned duties and authority (Prasetya, 2019; Siahaan, 2019). The performance measurement index for the Aerodrome Inspector, Regional Airport Authority Office, uses the Activity Performance Index in the Performance Accountability Report for Government Agencies (Siahaan, 2019). So that it can be seen the excellence of the Airport Inspector in 2019 and a strategy for developing the Airport Inspector's performance in 2020.

For that it is necessary to do research on:

1. How is the Performance of the Aerodrome Inspector in 2019 and the competitive advantage of the Aerodrome Inspector?
2. What alternative development strategies should be taken to improve the Performance of Aerodrome Inspectors in 2020?

2. Literature Review

Performance is the implementation of functions that are required of a person, performance is an act, an achievement, a general exhibition of skills ("Interview with John Whitmore," 2009). And Performance is an assessment of how someone has worked compared to predetermined targets (Holmes et al., 2004). Whereas strategy is "the creation of a unique and valuable position that is gained by carrying out a series of activities (E. Porter, 2011; Porter, 1996). To improve company performance in a sustainable manner requires a series of managerial decisions and actions that determine the performance of a company in the long term (Hunger, J. David, 2003). The company will have a competitive advantage is whatever the company does better than its competitors. When a company can do something a rival firm cannot or has something a rival firm wants, it can represent a competitive advantage (Fred R. David, 2011). Several previous studies on airport development strategies include;

Many airports have shifted from simple transfer stations to global logistics transportation hubs and, more recently, to multifunctional airport cities. This study carries out an integrated analysis of the development trends of city-airports and the formulation of strategies. By integrating trends and key factors for successful airport-city development and analyzing the competitive environment to detect the advantages and disadvantages of Taiwan Taoyuan International Airport with SWOT analysis, and developing a TOWS matrix so that an airport-city development strategy can be identified by consolidating the competitive advantage, key factors and airport-city development strategy (Hong et al., 2012). Airport cities are not only an index of a country's performance in development, but also play a role as a driver of national industry and a gateway to economic globalization. The Taoyuan International Airport case study illustrates the application of the proposed approach in systematic competitive analysis and the formulation of an airport city development strategy. Strategic planning that is put forward in the systematic operation of the unit is the key to the development of an airport city (Wang & Hong, 2011). The Asia-Pacific region has become one of the largest aviation markets in the world, and an increasing number of airports in the region are looking to develop into aviation hubs. In order to understand the competitive position of major airports in Asia, this study has selected ten major airports in Asia-Pacific, and has identified the markets in which these airports have an edge by looking at their level of connectivity both in terms of quantity and quality. The results show that airport authorities should identify their market position and strengthen their

comparative advantage based on the results(Chang et al., 2020). International airports must offer unique services and facilities to customers, modern service-based information systems and customer complaint handling systems. Service quality is one of the important concerns of international airports, because high quality brings many benefits to the organization, such as increased customer satisfaction and revenue. Therefore, to maintain high quality and compete with other international airports, International Airport needs to ensure the development of its services(Albeshr & Ahmad, 2015).

3. Method

This study aims to explain the competitive advantages of Aerodrome Inspectors in 2019 and determine the strategy for developing the performance of airport inspectors in 2020 using the SWOT analysis method with the Internal Factor Analysis Strategy (IFAS) and the External Factor Analysis Strategy (EFAS) which regulates strengths, weaknesses, opportunities, and the main threat becomes an organized and carried out list to see the factors that exist both internally and externally that affect the performance of the Airport Inspector. Primary data collection uses observation and interview methods, primary information is obtained from informants and can also interact directly(Sugiyono, 2016). Where the sources that researchers get are from the Head of Airport Service and Operation, Head of Airport Operations Section, Head of Airport Service Facilities Section, Group Leader 1 Airport Operations Section, and Group Leader 2 Airport Facilities and Services Section.

The IFAS and EFAS matrices were processed using the following steps(Freddy Rangkuti, 2014):

- a. Identification of internal and external factors of the organization
The first step is to identify internal factors, namely by listing all the weaknesses and strengths of the business. Internal factors are identified by listing all opportunities and threats of a business.
- b. The determination of the weight of each variable
The determination of the weight is done by proposing identification of external and internal strategic factors to those who have a strong knowledge of the internal and external factors of their business by using the pairwise comparison method.
- c. The determination of rating
The determination of rating is carried out on the variables of the analysis of the organizational situation. The weighting and rating results are included in the IFAS and EFAS matrices. Furthermore, the value of the weighting is multiplied by the average rating value for each factor and all the products are added vertically to obtain the total weighted score.

Apart from the IFAS and EFAS analyzes, other techniques used to formulate the Aerodrome Inspector's strategy are External Factor Evaluation and Internal Factor Evaluation(F. R. David, 2006; Fred R. David, 2011).

4. Result And Discussion

The Regional III Airport Authority Office has strategic objectives, namely:

1. Increasing the safety and security of air transportation in the work area of the Airport Authority Region III;
2. Increasing the performance of transportation facilities and infrastructure services in the working area of the Regional Airport Authority Office III;
3. Availability of competent and professional human resources for air transportation at the Regional Airport Authority Office III;
4. Increased air transportation services in disaster prone areas, borders, outermost and remote areas in the work area of the Airport Authority Region III;
5. Realizing good governance and clean governance in the Regional Airport Authority Office III.

The main business of aviation development at the Regional Airport Authority Office III is Regulation, Control and Supervision of Aircraft, Airports, Air Transport, Aviation Security and Aviation Navigation.

Based on the analysis of the advantages of the Regional III Airport Authority Office The Government Agency Performance Accountability Report in Table 1. Target and Realization of Performance in 2019, it can be concluded that the excellence of the Region III Airport Authority office in 2019 can be formulated as follows:

1. Competent Aerodrome Inspector;
2. Officials who support the performance of the Aerodrome Inspector;
3. An appropriate airport inspector educational background;
4. Aerodrome Inspector's knowledge of data base processing software;
5. Aerodrome inspector's knowledge of the data processing software; and
6. Aerodrome inspector's knowledge of license renewal data processing software.

Table 1. Target and Realization of Performance in 2019

Program Objectives	Performance Indicators		Target PK	Realization of Performance					Achievements (%)
	Description	Unit		I	II	III	IV	Total	
The increased safety and security of air transportation in the working area of the Airport Authority Office	The ratio of surveillance reports to Aviation Security that is followed up	Rasio	0,4	0,16	0,54	0,76	0,96	0,96	240
	Ratio of Follow-up Supervision Reports to Emergency Services	Rasio	0,3	0,1	0,1	0,5	0,5	0,5	166,67
	Ratio of the Supervision Report to Aircraft Feasibility and Operation which is followed up	Rasio	1,0	0,19	0,538	0,861	0,958	0,958	95,8
	Ratio of Supervision Reports to Fulfillment of Standards for Activities of Development Navigation Services which are Followed Up	Rasio	1,0	0,3	0,45	0,72	0,88	0,88	88
	Ratio of Supervision Reports to Airport Services and Operations that are followed up	Rasio	0,5	0,35	0,618	0,893	1,168	1,168	233,6
	Ratio of control to airport equipment and operating facilities	Rasio	1,0	0,29	0,35	0,56	0,76	0,76	76
Average Target Achievement								150,01	
Increased performance of transportation facilities and infrastructure services in the work area of the Airport Authority Office	Ratio of reports on the monitoring of air transport activities that are followed up	Rasio	1,0	0,3	0,61	0,835	1,153	1,153	115,3
	The ratio of the service reports of standard airports service users being followed up	Rasio	0,65	0	0,09	0,09	0,211	0,211	32,46
Average Target Achievement								73,88	
Availability of competent and professional air transport human	Competency fulfillment ratio for Aviation Inspectors	Rasio	1,0	0,44	0,807	0,85	0,91	0,91	91

Program Objectives	Performance Indicators		Target PK	Realization of Performance					Achievements (%)
	Description	Unit		I	II	III	IV	Total	
resources in the work area of the Airport Authority Office									
Average Target Achievement									91
Increased air transportation services in disaster prone areas, per border, outermost and remote areas	Ratio of reports on monitoring of implementation of pioneering services and air cargo subsidies that are followed up.	Rasio	1,0	0	0,33	0,49	0,49	0,49	49
Average Target Achievement									49
The realization of good governance and clean governance at the Airport Authority Office	Percentage Rate of Budget Absorption of Regional Air Tire Authority Office	%	95	16,63	36,93	56,41	92,38	92,38	97,24
	Asset Value of Inventory Airport Authority Office	%	95	0	0	0	95	95	100
Average Target Achievement									98,62

Source: The Government Agency Performance Accountability Report in 2019

Regarding the duties and functions of Airport Authority Officers, which are taken from the tables 1:

1. The ratio of supervision to service and airport operations which is followed up where the realization value or achievement in 2018 is 1.03 ratio from the target ratio set at 0.75 or it can be said that the success rate reached 137.33% of the target. Whereas in 2019 the realization value or achievement in 2019 was 1,168 ratios from the target ratio set at 0.5 ratio or it can be said that the success rate reached 233.6% of the target. This resulted in an increase in realization of 96.27% even though the target was lowered from 0.75 in 2018 to 0.5 in 2019.
2. The ratio of control to airport facilities / equipment and operations whose realization value or achievement in 2018 is 1 ratio from the target ratio set at 1 ratio or it can be said that the success rate reaches 480% of the target. Whereas in 2019 the realization value or achievement of 2019 was 0.76 from the target ratio set at 1 ratio or it can be said that the success rate reached 76% of the target. So that there is a decrease in realization of 406% with the same target in 2018 and 2019.
3. The competency fulfillment ratio for aviation inspectors with a ratio value of 1.06 from the targeted 0.9 or it can be said that the success rate reached 106.67% of the target In 2018. Whereas in 2019 the competency fulfillment ratio for aviation inspectors with a ratio value of 0.91 from the targeted 1 or it can be said that the success rate reached 91% of the target. So that there was a decrease in realization between 2018 and 2019 by 15.67%.

Table 2. Strategic Advantage Profile (SAP)

Component	Strength	Weakness
Human Resources	<ol style="list-style-type: none"> 1. Competent Aerodrome Inspector 2. Officials who support the performance of the Aerodrome Inspector 3. Appropriate Aerodrome Inspector educational background 4. Aerodrome Inspector's knowledge of data base processing software 5. Aerodrome inspector's knowledge of the data processing software 6. Aerodrome inspector's knowledge of license renewal data processing software 	<ol style="list-style-type: none"> 1. Less than optimal dedication of Aerodrome inspectors 2. Official decisions that do not support the performance of Aerodrome inspectors 3. Inappropriate Aerodrome Inspector educational background 4. Lack of skilled Aerodrome inspectors regarding data processing software 5. Lack of skilled Aerodrome inspectors regarding license renewal data processing software
Office Facilities and Infrastructure	<ol style="list-style-type: none"> 1. Adequate work facilities for inspectors 2. Adequate monitoring facilities 3. There are PCs in all agencies / work units 4. Measuring equipment for KKOP, personnel testing as well as equipment worthiness testing is available 	<ol style="list-style-type: none"> 1. There are work facilities that are becoming obsolete and damaged 2. Hardware maintenance for personnel testing and equipment worthiness testing is of little concern 3. Some equipment is outdated
Software Systems	<ol style="list-style-type: none"> 1. Supervision SOP 2. Testing SOP 3. Software for testing personnel and equipment worthiness testing 4. Appropriate inspector training program 	<ol style="list-style-type: none"> 1. SOP which sometimes needs to be updated to adapt to developments in the situation 2. Limited data base storage software 3. Inappropriate inspector training program
Budgeting	Allocated budget	Budget is cut during budget revisions

Source: Results of interviews and questionnaires from informants in 2020

The table 2 shows that the Aerodrome Inspector has 15 strengths and 12 weaknesses, so that the strengths are 3 points ahead of the weaknesses.

Table 3. Environmental Threat and Opportunity Profile (ETOP)

Component	Opportunity	Threat
Auditee	The auditee supports the provision of information and data during supervision (inspection and monitoring)	<ol style="list-style-type: none"> 1. Inadequate information and data from the auditee 2. Auditee's knowledge of aviation regulations is still lacking 3. Auditee is less cooperative
Permit applicant	Application requirements have been completed (administrative data) before checking and testing	The application requirements have not been completed (administrative data) prior to checking and testing
Rules and policies	<ol style="list-style-type: none"> 1. There are regulations that cover the duties and authorities of the airport inspector. 2. Leadership policies that support the duties and powers of airport inspectors 	<ol style="list-style-type: none"> 1. There are several rules that are not in sync with one another 2. There are no regulations for specific duties or authorities yet 3. Sometimes there are leadership policies that do not support the duties and powers of airport inspectors

Source: Results of interviews and questionnaires from informants in 2020

Table 3 shows that the Aerodrome Inspector faces a greater threat than the opportunities around him, because the threat is 3 points more.

The value of the total strengths (advantages) - the weaknesses of the Aerodrome Inspector which is the result of this internal analysis (SAP) is combined with the total value of the opportunities - threats (ETOP) into the SWOT analysis diagram, then the position of the Aerodrome Inspector is as shown in Figure 1.

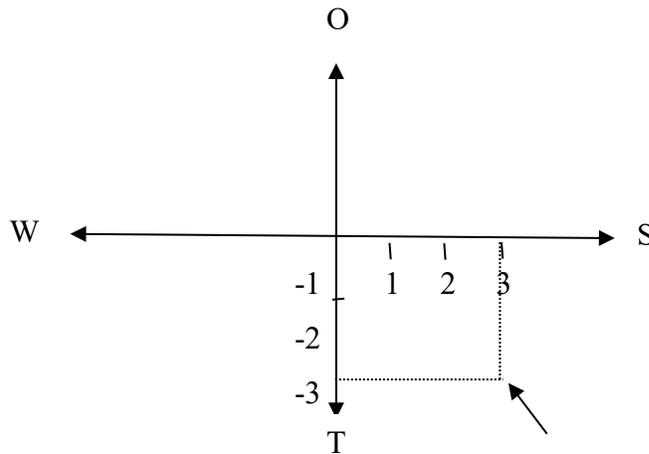


Figure 1 Aerodrome Inspector SWOT Analysis Diagram

Based on Figure 1, it is known that the position of the Regional Airport Authority Office III is in the ST (Force-Threat) Strategy. Where the strategy that can be done is market development, in this case the development of the Auditee and licensing applicants and to increase the intensity of communication, socialization of applicable regulations.

		Skor Total IFE			
		Kuat 3,00 – 4,00	Rata-rata 2,00 – 2,99	Lemah 1,00 – 1,99	
Skor Total EFE		I	II	III	Tinggi 3,00 – 4,00
	Grow & Build (3,24;2,65)	IV	V	VI	Rata-rata 2,00 – 2,99
		VII	VIII	IX	Rendah 1,00 – 1,99

Figure 2 Aerodrome Inspector IE Matrix

In Figure 2 it can be seen that the total IFE value of 3.24 indicates that the Aerodrome Inspector is in a strong position (more than 2.5 IFE total score) in an effort to take advantage of existing strengths and if needed can also hide weaknesses – weakness. And then the total EFE value of 2.65 shows that the Airport Inspector responds well to opportunities and avoids threats in the external environment. And the results of the mapping of the total IFE value and the total EFE value of the Airport Inspector into the IE Matrix show that the position of the Aerodrome Inspector is in quadrant / cell IV. This position implies that the most appropriate strategy to use is the Grow and Build strategy. Strategies that can be applied are intensive strategies (market penetration, market development and product development), and Integration Strategy (vertical integration and horizontal integration). To determine the recommended alternative strategy because it is the same strategy that is generated through the use of two different matrices, and it can be said that the results are suitable. After analyzing using QSPM, the total value of relative attractiveness (Total Attractiveness Score) was obtained for each alternative strategy as can be seen in table 4.

Table 4 .Total Attractiveness Score Aerodrome Inspector

No	Strategy	Value (TAS)
1.	Market penetration intensifies the performance of an airport inspector in responding to his duties and functions that are directly related to the auditee and the licensee.	3,73
2.	Product development, development in terms of productivity of Airport Inspectors.	5,15
3.	Market development, development from the side of the Auditee and licensing applicants.	4,54

Based on table 4, it can be seen that for the future development of Airport Authority Officers, the use of product development strategies in terms of Airport Inspector productivity can be prioritized. This strategy was chosen because it has the largest Total Attractiveness Score (TAS) among other alternative strategies with a score of 5.15.

5. Conclusions

Based on the SWOT Matrix Analysis and Discussion and based on the IE matrix (IE Matrix), the recommended strategy recommendations for Aerodrome Inspector Development in 2020 are growth and development strategies. Furthermore, the Quantitative Strategic Planning Matrix (QSPM) is used as a tool to evaluate alternative strategic choices more objectively based on the main internal-external success factors that have been previously identified. After analyzing using QSPM, that for the development of Aerodrome Inspectors' performance in 2020 or in the future Aerodrome Inspectors must prioritize the use of product development strategies in terms of aerodrome inspector productivity because they have a value of Total Attractiveness. The highest score (TAS) among other strategies, namely: 5.15.

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